

WHAT IS CLAIMED IS:

1. A method of displaying a number of computer-detected regions of pathological interest of an anatomical feature, the method comprising:
displaying an image of the anatomical feature; and
5 simultaneously displaying with the image a uniquely identified marker corresponding to each computer-detected region of pathological interest;
wherein each marker is generated from the image by a computer-implemented detection algorithm and is configured to incorporate viewable classification data entered by a user.

10 2. The method of claim 1, wherein each marker is uniquely identified by a label adjacent to the marker.

3. The method of claim 1, wherein the computer-implemented detection algorithm determines a probability of cancer for each region of pathological interest.

15 4. The method of claim 3, wherein each marker is configured to visually indicate the probability of cancer determined by the computer-implemented detection algorithm.

5. The method of claim 4, wherein the color of each marker visually indicates the probability of cancer determined by the computer-implemented detection algorithm.

20 6. The method of claim 1, wherein the viewable classification data entered includes a user-determined classification of the computer-detected region as a false-positive detection.

25 7. The method of claim 1, wherein the viewable classification data includes a user selection of the classification data from an electronically displayed menu of alternative classifications.

8. The method of claim 1, wherein each marker is configured to visually indicate the viewable classification data by the color of the marker.

9. The method of claim 1, wherein each marker is configured to be electronically stored with the image in a computer-readable medium.

5 10. A method of interactively displaying a number of unique locations of pathological interest of an anatomical feature, the method comprising:
displaying an image of the anatomical feature;
simultaneously displaying with the image a uniquely identified marker corresponding to each location of pathological interest;
10 receiving a first user-input command that selects one of the uniquely identified markers for classification;
displaying a menu of user-selectable classification alternatives in response to the first user-input command;
receiving a second user-input command that selects one of the user-
15 selectable classification alternatives; and
modifying the visual appearance of the displayed marker in response to the classification alternative selected by the second user-input command.

11. The method of claim 10, wherein each marker is uniquely identified by a label adjacent to the marker.

20 12. The method of claim 10, wherein the first user-input command is a mouse command which selects one of the uniquely identified markers for classification.

13. The method of claim 10, wherein the second user-input command is a mouse command which selects one of the user-selectable classification alternatives.

25 14. The method of claim 10, wherein modifying the visual appearance of the displayed marker in response to the classification alternative selected by the second user-input comprises changing the color of the displayed marker.

15. The method of claim 10, wherein each marker is configured to be electronically stored with the image in a computer-readable medium.

16. A system for displaying a number of unique locations of pathological interest of an anatomical feature detected by a computer-implemented detection algorithm, the system comprising:

storage media including an image of the anatomical feature and the locations of pathological interest of the anatomical feature detected by the computer-implemented detection algorithm;

a processor coupled to the storage media and operable to generate a uniquely identified marker corresponding to each computer-detected region of pathological interest, wherein each marker is configured to incorporate viewable classification data entered by a user;

a display coupled to the processor and configured to simultaneously display the image of the anatomical feature and each marker; and

a user-input device coupled to the processor and operable to receive a selection of one of the markers and enter classification data.

17. The system of claim 16, wherein the user-input device comprises a mouse.

18. The system of claim 16, wherein each marker is configured to be electronically stored with the image in a computer-readable medium.

19. The system of claim 16, wherein each marker is uniquely identified by a label adjacent to the marker.

20. The system of claim 16, wherein the viewable classification data entered includes a user-determined classification of the computer-detected region as a false-positive detection.

21. The system of claim 16, wherein the viewable classification data includes a user selection of the classification data from an electronically displayed menu of alternative classifications..

22. The system of claim 16, wherein each marker is configured to visually indicate the viewable classification data by the color of the marker.

23. The system of claim 16, wherein the computer-implemented detection algorithm determines a probability of cancer for each region of pathological interest.

5 24. The system of claim 23, wherein each marker is configured to visually indicate the probability of cancer determined by the computer-implemented detection algorithm.

25. The system of claim 24, wherein the color of each marker visually indicates the probability of cancer determined by the computer-implemented detection
10 algorithm.

26. A marker for use with a graphical user interface for uniquely identifying a location of pathological interest, the marker comprising:
a unique identifier for the location of pathological interest; and
a visual indication of the probability of cancer for the location of
15 pathological interest;
wherein the marker is configured to incorporate viewable classification data based on user input.

27. The marker of claim 26, wherein the unique identifier comprises a label adjacent to the marker.

20 28. The marker of claim 26, wherein the visual indication of the probability of cancer for the location of pathological interest is indicated by the color of the marker.

29. The marker of claim 26, wherein the viewable classification data includes a user selection of the classification data from an electronically displayed
25 menu of alternative classifications.

30. The marker of claim 26, wherein the marker is configured to visually indicate the viewable classification data by the color of the marker.

31. The marker of claim 26, wherein the viewable classification data includes a user-determined classification of the region as a false-positive detection.

32. The marker of claim 26, wherein the viewable classification data includes a user-determined classification of the region as a cyst.

5 33. The marker of claim 26, wherein the viewable classification data includes a user-determined classification of the region as a nodule.

34. The marker of claim 26, wherein the viewable classification data includes a user-determined classification of the region as a microcalcification.